Contents of Vol. 22

Vol. 22, No. 1

Community evacuation following the Spencer metal processing plant fire, Nanticoke, Pennsylvania
P. Duclos, S. Binder (Atlanta, GA, U.S.A.) and R. Riester (Kingston, PA, U.S.A.) 1

The predictions of human mortality from chemical accidents with especial reference to the lethal toxicity of chlorine
V.C. Marshall (Bradford, U.K.) 13

Warning and response in two hazardous materials transportation accidents in the U.S.A.
G.O. Rogers and J.H. Sorensen (Oak Ridge, TN, U.S.A.) 57

Chemical safety: Organization of infrastructures in India
C.R. Krishna Murti (Madras, India) 75

Wind effects on diffusion flames of fires of high source momentum
D.M. De Faveri, A. Vidili, R. Pastorino and G. Ferraiolo (Genoa, Italy) 85

Illegal hazardous-waste disposal and enforcement in the United States: A preliminary assessment
J.K. Hammitt (Santa Monica, CA, U.S.A.) and P. Reuter (Washington, D.C., U.S.A.) .. 101

EPA Project Summary
Evaluation, development and verification of field methods for rapid, on-site determination of appropriate chemical protective clothing
T.R. Carroll and A.D. Schwope (Cambridge, MA, U.S.A.) 121

Announcement 129
Book reviews 131

Vol. 22, No. 2

Special issue:

Hazardous Waste Incineration: Current Practices and Future Directions — Proceedings of the 1st Annual Gulf Coast Hazardous Substance Research Center Symposium on Hazardous Waste Incineration, held at Lamar University, Beaumont, TX, U.S.A., February 23–24, 1989.

Preface iii

Test burns for banned pesticides
D.A. Oberacker (Cincinnati, OH, U.S.A.) 135

Trial burns: Methods perspective
L.D. Johnson (Research Triangle Park, NC, U.S.A.) 143

RCRA trial burns: Adventures at Rollins
R.A. Carnes (Kissimmee, FL, U.S.A.) 151

Products of incomplete combustion (O_x, CO_x, HO_x, NO_x, SO_x, RO_x, MO_x, and PO_x)
S.L. Daniels (Midland, MI, U.S.A.) 161

Pathways of formation of chlorinated PICs from the thermal degradation of simple chlorinated hydrocarbons
B. Dellinger, P.H. Taylor, D.A. Tirey (Dayton, OH, U.S.A.) and C.C. Lee (Cincinnati, OH, U.S.A.) 175

Development of real-time stack-gas analysis methods
E.B. Overton (Baton Rouge, LA, U.S.A.) 187

Rotary kiln incineration — Combustion chamber dynamics
V.A. Cundy, T.W. Lester, C. Leger, G. Miller, A.N. Montestruc, S. Acharya, A.M. Sterling (Baton Rouge, LA, U.S.A.), D.W. Pershing, J.S. Lighty, G.D. Silcox and W.D. Owens (Salt Lake City, UT, U.S.A.) 195

Review of design and operational concepts for the DuPont regional incinerator Sabine River Works, Orange, Texas
P.D. Lorimer (Orange, TX, U.S.A.) 221

Experience with air pollution control equipment and continuous monitoring instrumentation on hazardous waste incinerators
A.J. Buonicore (Southport, CT, U.S.A.) 233

Incinerator operations
J.E. Bayer (Oak Brook, IL, U.S.A.) 243

Poster Abstracts 251

Vol. 22, No. 3

The toxicity of a red phosphorus smoke after repeated inhalation
T.C. Marrs, H.F. Colgrave, J.A.G. Edginton, P. Rice and N.L. Cross (Salisbury, Great Britain) 269

Chemical transport in the top soil zone — The role of moisture and temperature gradients
Y. Cohen and P.A. Ryan (Los Angeles, CA, U.S.A.) 283

Towards an Australian system for hazardous material incidents reporting
C. Winder and R. Tandon (Sydney, NSW, Australia) 305

The application of box models in the analysis of toxic hazards by using the probit dose–response relationship
J.K.W. Davies (Sheffield, Great Britain) 319

Atmospheric dispersion of toxic gases in a complex environment
E. Vergison, J. van Diest and J.C. Basler (Brussels, Belgium) 331

Modeling gasoline fate and transport in the unsaturated zone
D.D. Reible, M.E. Malhiet (Baton Rouge, LA, U.S.A.) and T.H. Illangasekare (Boulder, CO, U.S.A.) 359

Treatability studies for on-site biological remediation of soils and leachates contaminated by coal conversion residuals and by-products
A. Brenner (Beersheva, Israel), R.L. Irvine, L.H. Ketchum, Jr., C.F. Kulpa, Jr. (Notre Dame, IN, U.S.A.) and J.P. Moreau (Syracuse, NY, U.S.A.) 377

Mechanisms responsible for the biodegradation of organic compounds in the subsurface
M.S. Morris and J.T. Novak (Blacksburg, VA, U.S.A.) 393

Corrigendum
Large scale propane release experiments over land at different atmospheric stability classes
M. Heinrich, E. Gerhold and P. Wietfeldt (Hamburg, F.R.G.) 407

Meeting Report
6th international symposium on loss prevention and safety promotion in the process industries, held at Oslo, Norway, 19–22 June 1989
S.J. Skinner (Basingstoke, Great Britain) 415

Book Reviews 417
Announcements 421
Author Index of Vol. 22 424
Contents of Vol. 22 426